PROJECT INFORMATION PACKAGE

Runway Safety Area Feasibility Study

Key West International Airport

Key West, Florida

Prepared on behalf of the

Monroe County Board of County Commissioners

and the

Federal Aviation Administration

by

URS Corporation

October 2002

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1.0 Introduction

The Monroe County Board of County Commissioners (County) and the Federal Aviation Administration (FAA) are evaluating the feasibility of providing a standard Runway Safety Area (RSA) for Runway 9/27 at the Key West International Airport (KWIA). The RSA is an area around the runway that provides for aircraft support in the event of an excursion from the paved runway surface. The existing RSA does not meet FAA requirements and design standards.

The RSA is an integral part of the runway environment, and numerous instances at other airports, including recent incidents with fatalities, underscore the importance of having an adequate RSA. The stable surface helps an aircraft come to a stop while minimizing structural damage and/or resultant injury. Of importance is the RSA provided at each end of the runway, where most excursions tend to occur. The RSA also provides a surface suitable for the movement of emergency vehicles.

Given the airport's physical setting, the scope of this feasibility study is focused on the potential to obtain necessary environmental permits and the probable magnitude and cost of mitigation. The feasibility study includes coordination with select federal and state agencies to identify potential permit issues and probable mitigation requirements. An evaluation will then be made of possible mitigation scenarios and costs. The results will provide information for a determination by the FAA of the feasibility of providing a standard RSA.

2.0 Airport Information

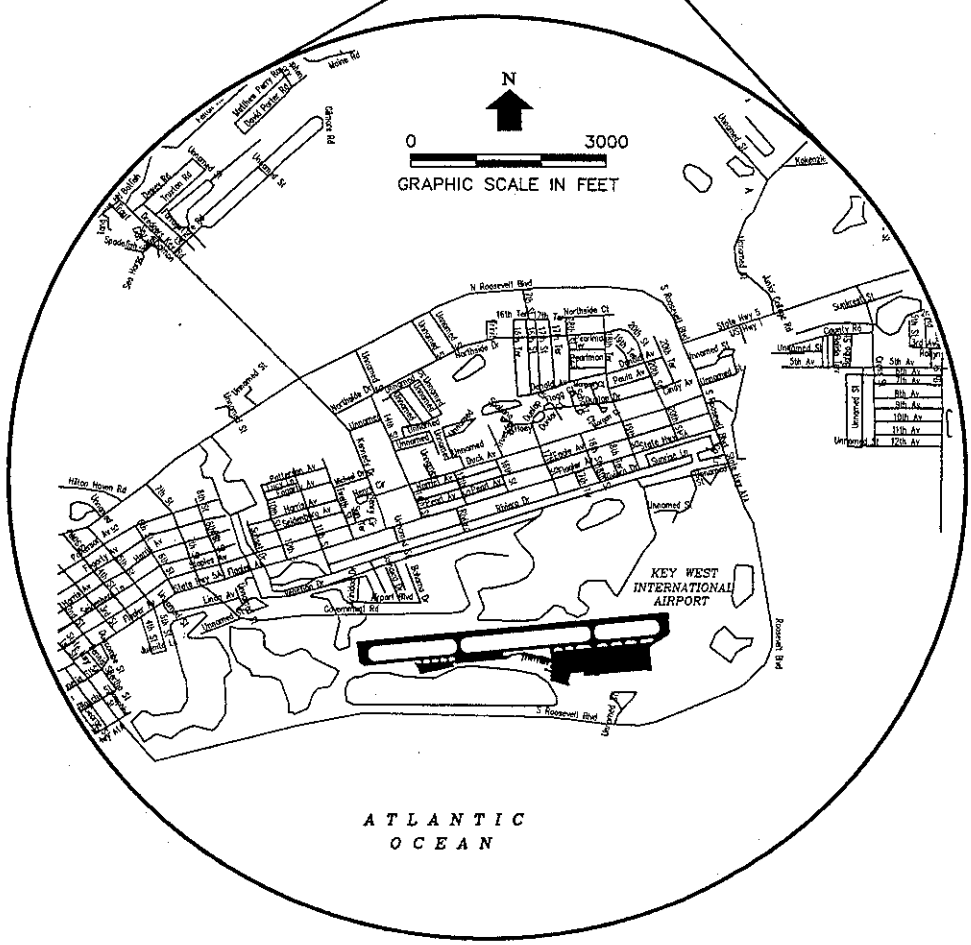
2.1 Key West International Airport

KWIA is a critical component of the transportation network serving south Monroe County and the City of Key West. The community relies on aviation as a major means of travel and for the shipment of goods. Seventy percent of passenger traffic at KWIA is tourism-related. The total annual economic impact of an airport to its community is a combination of direct and indirect impacts associated with the provision and use of aviation services as well as the multiplier effect associated with the re-spending of money in the area. The total annual economic impact of KWIA is $806 million, of which $260 million is paid in earnings to 12,288 jobs (Florida Aviation System Plan, 2000).

The airport provides airfield, terminal, and support facilities for scheduled commercial flights, air charter/taxi operations, air cargo, and general aviation operations. The location of the airport is shown in Figure 2.1-1 and the layout of airfield facilities are depicted in Figure 2.1-2.

2.2 Airport Activity

The number of aircraft operations (take-offs and landing) and annual passenger enplanements for 2001, 2011, and 2020 are presented in Table 2.3-1. As shown, the level of aircraft operations and the number of commercial passengers are expected to increase substantially over the next 20-year period. During peak months in 2001, approximately 349 aircraft operations were generated daily at the airport. Average daily operations during peak months are expected to reach 419 by 2021 (URS Corporation, 2002).



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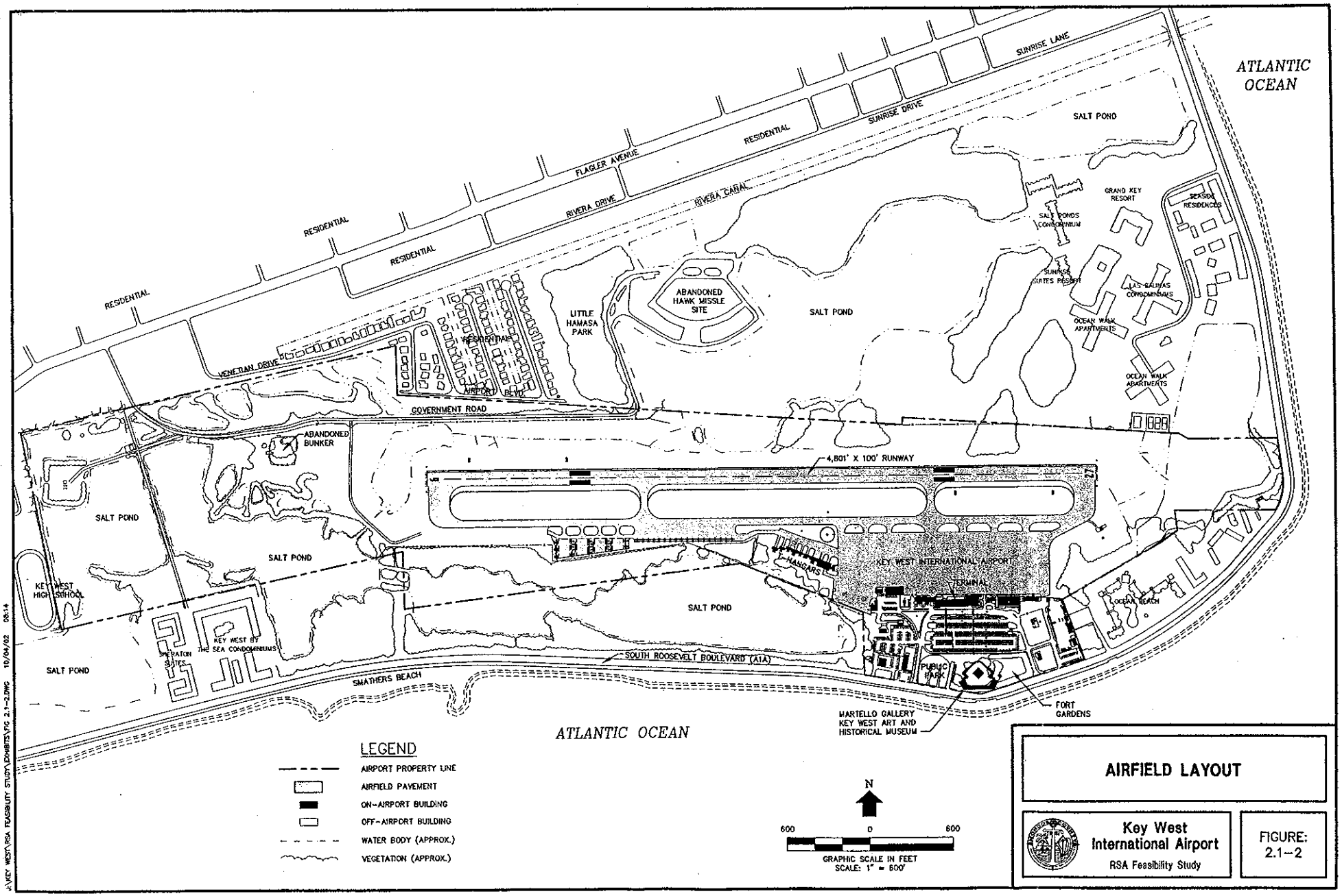
Key West International Airport
RSA Feasibility Study

VICINITY MAP

FIGURE: 2.1-1



AIRFIELD LAYOUT

Key West International Airport
RSA Feasibility Study

FIGURE: 2.1–2

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TABLE 2.3-1
AIRCRAFT OPERATIONS AND ENPLANEMENTS

Year	Annual Aircraft Operations	Increase (%)	Annual Commercial Passenger Enplanements	Increase (%)
2001	97,517	--	280,376	--
2011	109,032	11.8	338,711	20.8
2020	128,782	18.1	436,731	28.9

Source: Federal Aviation Administration, *Terminal Area Forecast*, 2000.

A variety of commercial and general aviation aircraft operate at KWIA. Commercial air carrier aircraft operating at the airport include small commuter aircraft and the turbo-prop ATR-72. Air carrier operations using regional jets (CRJ-200 and CRJ-700) have recently been introduced to the airport. These aircraft are more demanding (e.g., approach speed) and can carry 50 to 70 passengers.

2.3 Airport Master Plan Update

The County, with assistance from the FAA, is currently in the process of updating the Airport Master Plan for KWIA. The master plan will provide a long-term plan for airport improvements necessary to meet future aviation demand. That airport master plan was previously updated in 1986.

3.0 Key West International Airport Runway Safety Area Requirements

3.1 Runway Safety Area Definition

An RSA is defined in the FAA Advisory Circular (AC) 150/5300-13, *Airport Design*, as:

> "A defined surface surrounding the runway prepared or suitable for reducing the risk of damage to airplanes in the event of an undershoot, overshoot, or excursion from the runway."

3.2 Runway Safety Area Design Standards

3.2.1 Runway Safety Area Dimensional Requirements

RSA dimensions are dependent on the airport's Airport Reference Code (ARC). The ARC is based on the approach speed and wingspan of Critical Aircraft operating at the airport. Airplanes operating at higher speeds require increased safety allowances for speed and reduced decision time. As such, the RSA requirements increase as the ARC increases.

The ARC for KWIA is D-III. This is based on Approach Category D (CRJ-200 Regional Jet) and Airplane Design Group III (Dash 8). The required RSA dimensions for the D-III ARC is 500 feet wide by 1,000 feet beyond each runway end. Appendix A contains the applicable reference table from FAA AC 150/5300-13, *Airport Design*.

3.2.2 Runway Safety Area Construction Requirements

FAA AC 150/5300-13, *Airport Design*, requires that the RSA be:

1. Cleared and graded and have no potentially hazardous ruts, humps, depressions, or other surface variations;

2. Drained to prevent water accumulation;

3. Capable, under dry conditions, to support equipment (including rescue and fire fighting vehicles) and the occasional passage of aircraft without causing structural damage to the aircraft; and

4. Free of objects, except for those required by function.

3.3 Existing and Proposed Runway Safety Area Dimensions

The existing RSA at the airport does not meet the dimensional requirements for the current D-III ARC.

The existing RSA and the required RSA are shown in Figures 3.3-1, 3.3-2, and 3.3-3. Table 3.3-1 summarizes the dimensions of the required, existing, and proposed RSA. It is important to note that the RSA improvement project considered in this feasibility study is required for airport operations.

TABLE 3.3-1
RUNWAY SAFETY AREA DIMENSIONS – EXISTING AND PROPOSED

RSA Dimensions	Required (ARC D-III)	Existing	Proposed
Width Along Runway	500'	300' +/-	500'
Runway 9 End	500' W x 1,000' L	300' W x 110' L +/-	500' W x 1,000' L
Runway 27 End	500' W x 1,000' L	300' W x 210' – 400' L +/-	500' W x 1,000' L

Source: FAA AC 150/5300-13; URS Corporation, 2002.

3.4 FAA Runway Safety Area Implementation

Design FAA AC 150/5300-13, *Airport Design*, specifies the dimensions, gradients, and particulars of a RSA as applied to different ARC classifications.

Certification Federal Aviation Regulations (FAR) Part 139, *Certification and Operations: Land Airports Serving Certain Air Carriers*, provides certification requirements for airports with scheduled commercial passenger service (14 CFR 139). KWIA currently holds a Part 139 certificate and must comply with the requirements of the certification program.

LEGEND

- AIRPORT PROPERTY LINE
- REQUIRED RUNWAY SAFETY AREA (RSA)
- REQUIRED RUNWAY OBJECT FREE AREA (ROFA)
- EXISTING RUNWAY SAFETY AREA

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GRAPHIC SCALE IN FEET

Key West International Airport
RSA Feasibility Study

RUNWAY 9 SAFETY AREA REQUIREMENTS

FIGURE: 3.3–1

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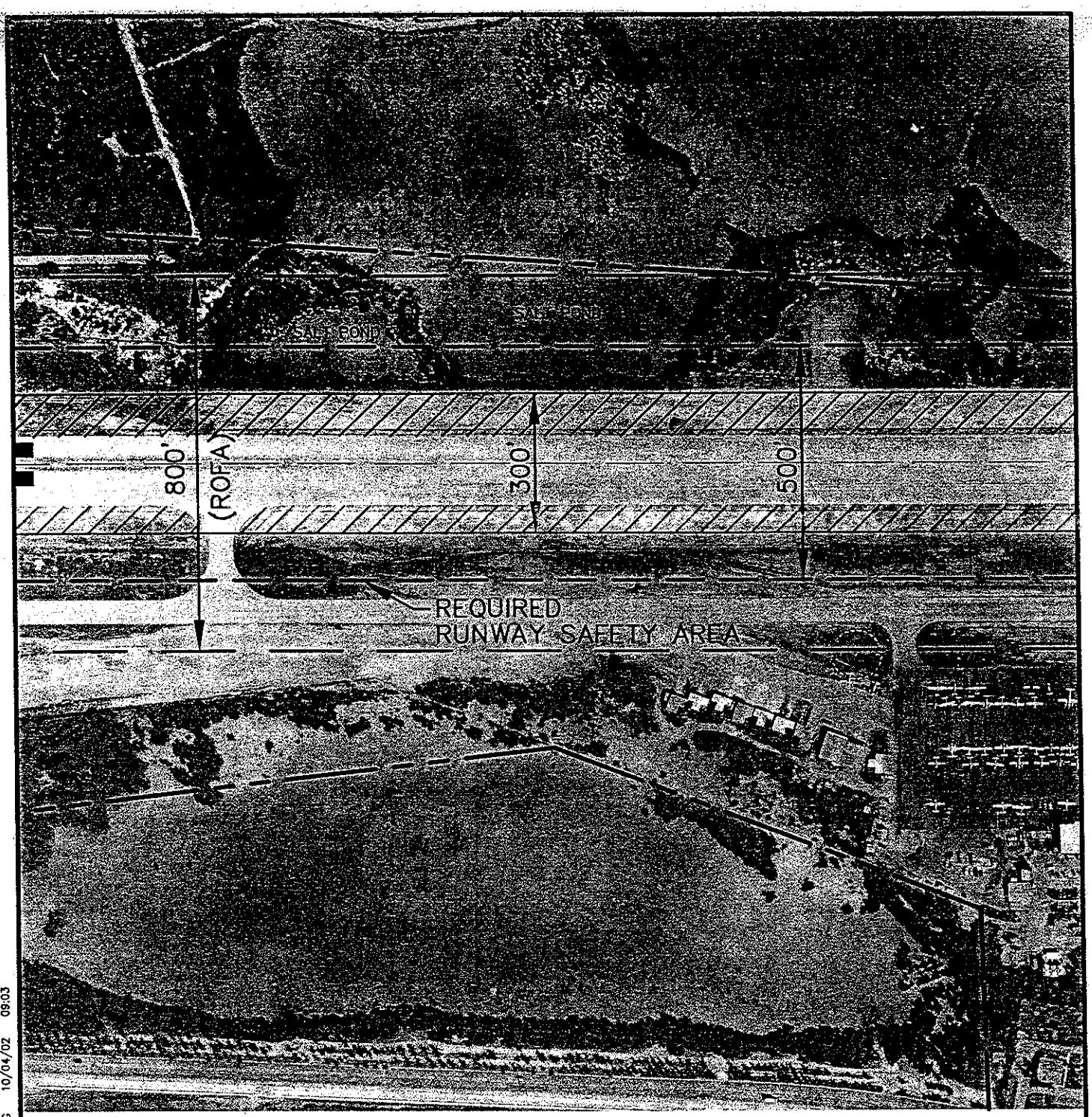

LEGEND

- AIRPORT PROPERTY LINE
- REQUIRED RUNWAY SAFETY AREA (RSA)
- REQUIRED RUNWAY OBJECT FREE AREA (ROFA)
- EXISTING RUNWAY SAFETY AREA

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Key West International Airport
RSA Feasibility Study

RUNWAY 9-27 SAFETY AREA REQUIREMENTS

FIGURE: 3.3–2

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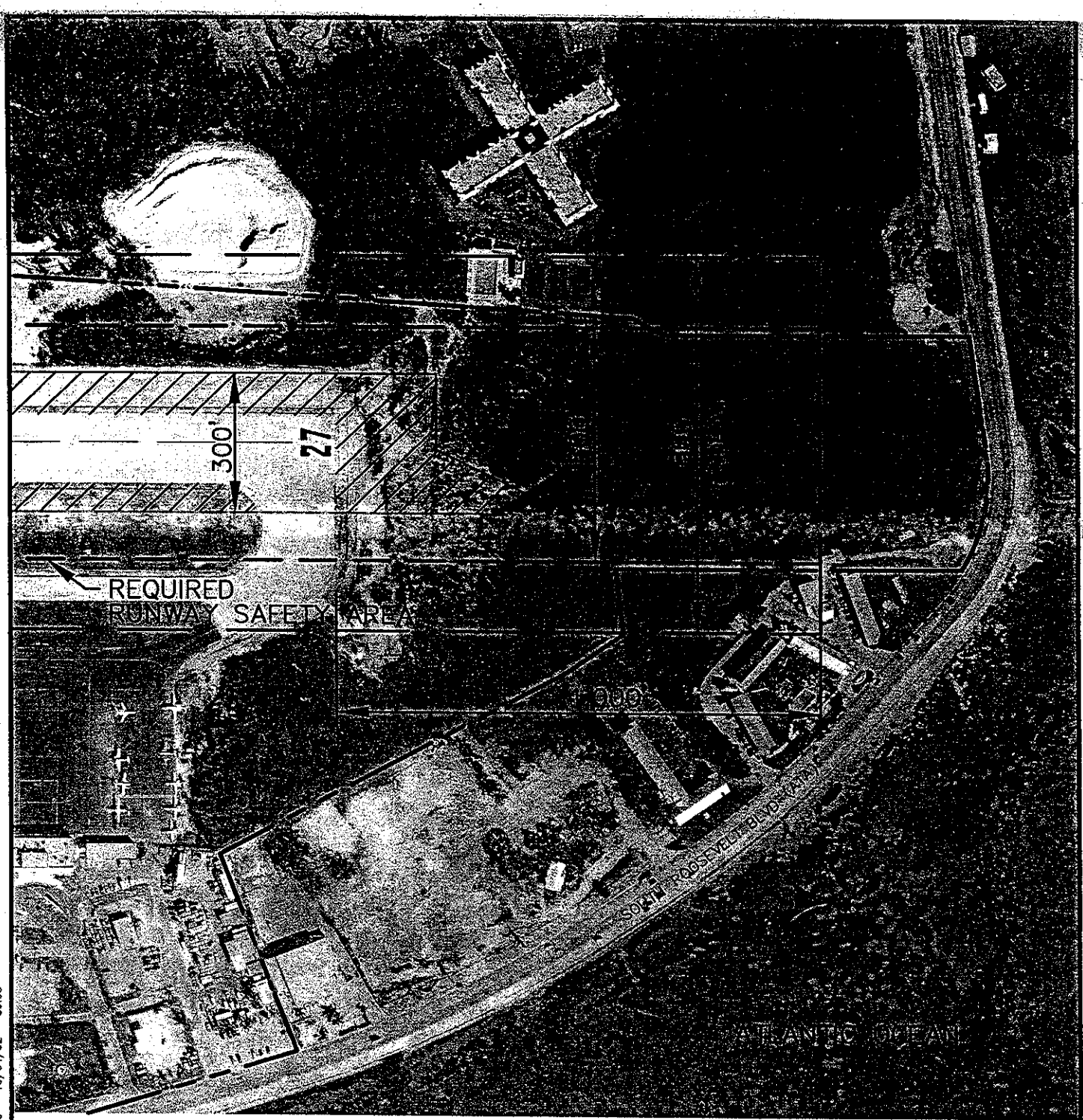

LEGEND

- AIRPORT PROPERTY LINE
- REQUIRED RUNWAY SAFETY AREA (RSA)
- REQUIRED RUNWAY OBJECT FREE AREA (ROFA)
- EXISTING RUNWAY SAFETY AREA

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GRAPHIC SCALE IN FEET

Key West International Airport
RSA Feasibility Study

RUNWAY 27 SAFETY AREA REQUIREMENTS

FIGURE: 3.3-3

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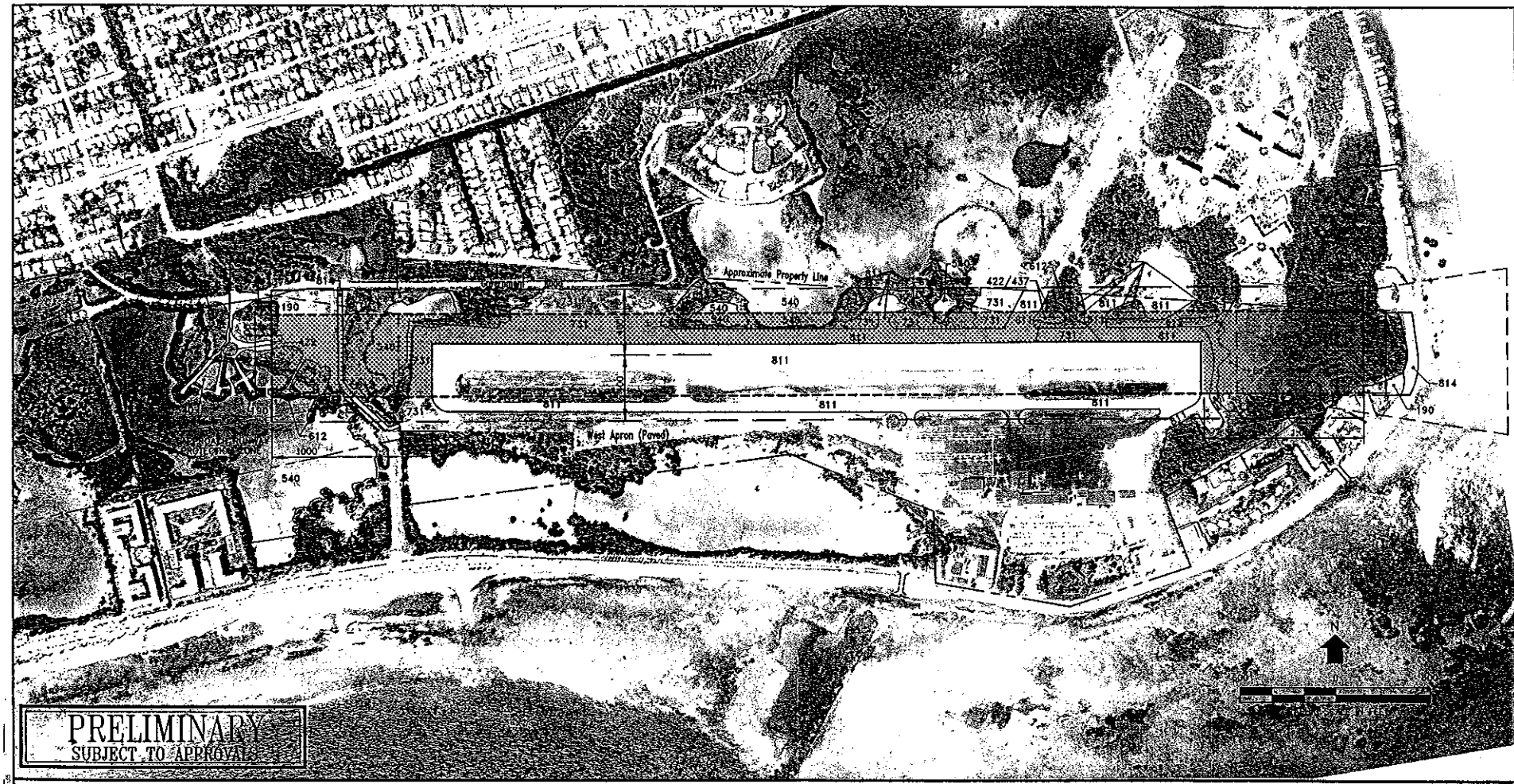

PRELIMINARY
SUBJECT TO APPROVAL

PRELIMINARY PROJECTED RSA IMPACTS (ACRES)	
FLUCFCS CODE	TOTAL
190	2.6
422/437	2.2
540*	3.9
612*	17.3
731*	9.8
811	7.2
814	0.4
TOTAL	43.4

FLORIDA LAND USE, COVER AND FORMS CLASSIFICATION SYSTEM (FLUCFCS)

190	OPEN LAND
422/437	BRAZILIAN PEPPER/ AUSTRALIAN PINE
540	BAYS AND ESTUARIES
612	MANGROVE SWAMPS
731	EXPOSED ROCK WITH MARSH GRASSES
811	AIRPORT
814	ROADS AND HIGHWAYS

LEGEND

- AIRPORT PROPERTY LINE
- EXISTING AIRPORT BUILDINGS
- REQUIRED RUNWAY SAFETY AREA
- RUNWAY OBJECT FREE AREA
- APPROACH RUNWAY PROTECTION ZONE
- AREA OF PROJECTED DIRECT IMPACT

ATTACHMENT A

KEY WEST INTERNATIONAL AIRPORT
RUNWAY SAFETY AREA
FEASIBILITY STUDY

REVISIONS	DATE

DESIGN BY: RRS
DRAWN BY: KFS
CHECKED BY: GGF
DATE: 6-11-02

URS

FIG. 4.1-1

FAR Part 139.309 requires that each certificate holder provide and maintain safety areas for runways and taxiways. In the case of KWIA, the existing RSA configuration has been grandfathered by the FAA; however, changes in operations and a planned resurfacing project require that the RSA meet current standards. FAR Part 139 references the *Airport Design* circular for the configuration and maintenance of safety areas.

RSA Program The FAA has aggressively restated its long-standing policy to bring safety areas up to standard by the issuance of FAA Order 5200.8, *Runway Safety Area Program*, in October 1999. The order establishes procedures to ensure that all RSAs at federally obligated airports and Part 139 certificated airports conform to the standards in FAA AC 150/5300-13, to the extent practicable. The program calls for an inventory of RSAs at each airport and a determination of compliance for each RSA.

In regard to RSA determinations, the order states: *"When making determinations about the practicability of obtaining the RSA, the first attempt shall consist of investigating fully the possibility of obtaining an RSA that meets the current standards through a traditional graded area surrounding the runway."* (FAA Order 5200.8).

A *Runway Safety Area Study* was prepared in March of 2001 for the airport. However, the FAA has requested further investigation of the feasibility of implementing a standard RSA at KWIA. That request has resulted in the preparation of this study.

4.0 Proposed Improvements

4.1 Provide Standard RSA

The proposed improvements to the RSA considered in this study consist of constructing a standard, graded RSA. The dimensions would be 500 feet wide and extend 1,000 feet beyond each runway end. A diagram depicting the proposed RSA improvements is depicted in Figure 4.1-1.

The proposal would require the placement of fill material into wetlands adjacent to the existing runway infrastructure. The proposal will have the potential to impact approximately 31 acres of wetlands. The subject wetlands are classified under the Florida Land Use, Cover and Forms Classification System (FLUCFCS) as bays and estuaries, mangrove swamp; and exposed rock with marsh grasses. Anticipated wetland impacts, by type, are presented in Table 4.1-1.

The dominant natural features adjacent to the airfield are salt ponds. The salt ponds, which have been modified over the years by residential, commercial, military, and transportation development, are highly variable in regards to water quality (e.g., salinity, temperature). Salt ponds that would be involved with the RSA are either isolated, thus rainfall supplied, or tidally influenced if connected to the Riviera Canal or existing culverts.

TABLE 4.1-1
POTENTIAL STANDARD RSA WETLAND IMPACTS

Wetland Classification	FLUCFCS Code	Approximate Area Impacted (acres)
Bays and Estuaries	540	3.9
Mangrove Swamps	612	17.3
Exposed Rock/Marsh Grass	731	9.8
Total		**31.0**

Source: URS Corporation, 2002.

The designation of the Florida Keys as an Area of Critical State Concern and as having Outstanding Florida Waters provides an emphasis on maintaining water quality in the Florida Keys area. These issues are an essential part of the planning process associated with the RSA study.

It should be noted that a comprehensive delineation and inventory of wetland resources on airport property has not been conducted. The potential wetland impacts identified above are calculated from aerial photography. Over the years, individual projects have resulted in the delineation of wetlands in specific areas on the airport.

4.2 Runway Object Free Area Considerations

The D-III ARC also affects the implementation of the airport's Runway Object Free Area (OFA). The OFA is an "area on the ground centered on a runway, taxiway, or taxilane centerline provided to enhance the safety of aircraft operations by having the area free of objects, except for objects that need to be located in the OFA for air navigation or aircraft ground maneuvering purposes" (FAA AC 150/5300-13).

For a D-III ARC, the requirement for the runway OFA is 800 feet wide (centered on the runway centerline) and 1,000 feet beyond the each runway end. Buildings, structures, trees, and brush are usually removed from the OFA. There are no fill or grade requirements for the OFA.

At KWIA, the impact of implementing the runway OFA would be the additional clearing of approximately 14 acres of trees and brush. The area would be comprised of approximately 11.5 acres of mangrove and 2.5 acres of Brazilian pepper and Australian pine. It is anticipated that the clearing of trees and brush would be accomplished manually without the use of heavy equipment in wetlands. The effect, however, would be the removal of some habitat provided by the trees and vegetation in the OFA.

In order to minimize impacts at KWIA in regard to proposed safety improvements, the FAA is willing to consider a Modification of Standards to the OFA to allow the OFA at the same dimensions as the required RSA, provided that the County provides documentation that the reduced OFA has an acceptable level of safety. The result would be an OFA that is 500 feet wide by 1,000 feet in length beyond each runway end.

The modification of the OFA is proposed since the OFA is a land clearance requirement, as opposed to the grading and construction requirement of an RSA that is needed to support an aircraft in the event of a runway excursion. The Modification of Standards would require an FAA finding that the proposed modification is safe for the specific site and conditions. In the case of RSAs, FAA AC 150/5300-13, *Airport Design*, states that a Modification of Standards is not allowed for RSA dimensional standards.

APPENDIX A

RUNWAY SAFETY AREA DESIGN STANDARDS

Table 3-3. Runway design standards for aircraft approach categories C & D (Refer also to Appendix 16 for the establishment of new approaches)

ITEM	DIM[1]	AIRPLANE DESIGN GROUP					
		I	II	III	IV	V	VI
Runway Length	A	- Refer to paragraph 301 -					
Runway Width	B	100 ft 30 m	100 ft 30 m	100 ft[2] 30 m[2]	150 ft 45 m	150 ft 45 m	200 ft 60 m
Runway Shoulder Width[3]		10 ft 3 m	10 ft 3 m	20 ft[2] 6 m[2]	25 ft 7.5 m	35 ft 10.5 m	40 FT 12 M
Runway Blast Pad Width		120 ft 36 m	120 ft 36 m	140 ft[2] 42 m[2]	200 ft 60 m	220 ft 66 m	280 ft 84 m
Runway Blast Pad length		100 ft 30 m	150 ft 45 m	200 ft 60 m	200 ft 60 m	400 ft 120 m	400 ft 120 m
Runway Safety Area Width[4]	C	500 ft 150 m	500 ft 150 m	500 ft 150 m	500 ft 150 m	500 ft 150 m	500 ft 150 m
Runway Safety Area Length Beyond RW End[5]	P	1,000 ft 300 m	1,000 ft 300 m	1,000 ft 300 m	1,000 ft 300 m	1,000 ft 300 m	1,000 ft 300 m
Obstacle Free Zone Width and length		- Refer to paragraph 306 -					
Runway Object Free Area Width	Q	800 ft 240 m	800 ft 240 m	800 ft 240 m	800 ft 240 m	800 ft 240	800 ft 240
Runway Object Free Area Length Beyond RW End[5]	R	1000 ft 300 m	1000 ft 300 m	1000 ft 300 m	1000 ft 300 m	1,000 ft 300 m	1000 ft 300

1/ Letters correspond to the dimensions on figures 2-1 and 2-3.

2/ For Airplane Design Group III serving airplanes with maximum certificated takeoff weight greater than 150,000 pounds (68 100 kg), the standard runway width is 150 feet (45 m), the shoulder width is 25 feet (7.5 m), and the runway blast pad width is 200 feet (60 m).

3/ Design Groups V and VI normally require stabilized or paved shoulder surfaces.

4/ For Airport Reference Code C-I and C-II, a runway safety area width of 400 feet (120 m) is permissible. For runways designed after 2/28/83 to serve Aircraft Approach Category D, the runway safety area width increases 20 feet (6 m) for each 1,000 feet (300 m) of airport elevation above MSL. Refer to paragraph 305.

5/ The runway safety area and runway object free area lengths begin at each runway end when stopway is not provided. When stopway is provided, these lengths begin at the stopway end.

FAA Advisory Circular 150/5300-13 (Change 7), Airport Design. 2002.

ATTENDANCE ROSTER

RSA Feasibility Study
Key West International Airport

Meeting Date: October 9, 2002
Meeting Location: SFWMD Office, West Palm Beach, FL

NAME	REPRESENTING	ADDRESS	PHONE	E-MAIL
PETER GREEN	URS Corp - Tampa	Tampa, FL	813-675-6556	Peter_Green@URScorp.com
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BART VERNACE	FAA-ORLANDO	"	" x-27	bart.vernace@faa.gov
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Anita Bain	SFWMD	3301 Gun Club Rd WPB FL 33406	561-682-6844	abain@sfwmd.gov
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URS

Meeting Documentation

Project: **Key West International Airport – RSA Feasibility Study**

Meeting Date/Time: **October 9, 2002**

Meeting Location: South Florida Water Management District Office
West Palm Beach Florida

Attendees:
Anita Bain, South Florida Water Management District
Kevin Dickson, South Florida Water Management District
Ron Peekstok, South Florida Water Management District
Andrew Gude, US Fish and Wildlife Service
Allen Webb, US Fish and Wildlife Service
Jocelyn Karazsia, National Marine Fisheries Service
Paul Kruger, US Army Corps of Engineers (by telephone)
Vic Anderson, US Army Corps of Engineers (by telephone)
Bart Vernace, Federal Aviation Administration
Virginia Lane, Federal Aviation Administration
Mil Reisert, URS Corporation
George Feher, URS Corporation
Peter Green, URS Corporation

Authored By: Peter Green, URS Corporation

Subject: **Pre-Application Consultation Meeting for Proposed RSA Improvements**

The following is a summary of topics discussed:

1. The FAA opened the meeting with a brief introduction of the feasibility study and purpose of meeting.

   The FAA is evaluating the substandard Runway Safety Area (RSA) at the Key West International Airport (KWIA) in response to a planned runway maintenance overlay. The project under consideration is the construction of a standard RSA. The purpose of the project is to improve safety at the airport for existing operations.

   The RSA had been grandfathered under FAR Part 139. However, FAA Order 5200.8 requires that the proposed runway pavement overlay shall also provide for improving the RSA in accordance with the FAA's determination of the practicability of meeting RSA standards. The feasibility study will include a series of meetings to discuss permit issues and probable mitigation requirements.

2. URS presented a brief overview of the proposed RSA project and scope of the feasibility study.

   The RSA improvements are required based on the airport's Airport Reference Code (ARC). The current ARC is D-III. The dimensions of the standard RSA for ARC D-III is 500' wide by 1,000' beyond each runway end. The potential impact of the RSA footprint is approximately 31 acres, as estimated from aerial photographs and knowledge of the site.

The Runway Object Free Area (OFA) is an area around the runway to be kept free of objects higher than the elevation of the RSA. The area of wetlands inside the OFA is approximately 14 acres. The trees/vegetation can be either topped or cleared. It is anticipated that clearing would be conducted manually without heavy machinery. It was noted that other man-made features are located in the OFA (e.g., buildings). The FAA may consider a Modification to Standards for the OFA to reduce the width to 500' to match the RSA footprint. FAA noted that a Modification of Standards will require a study to document that the reduced OFA will provide adequate safety.

The purpose of the feasibility study is to develop and evaluate information relative to permitting and probable mitigation requirements and costs. The input and comment from the agencies represented at the meeting is essential for the development of mitigation scenarios. The findings of the report will be used by the FAA in determining the practicability of providing a standard RSA.

3. The issues of airport capacity and potential future runway extensions were discussed. It was noted that the RSA project at hand is a safety issue for current operations and is not connected with any future development at the airport and that the project itself would not allow larger aircraft to use the airport.

4. It was noted by the FAA that any proposal for a future runway extension or airport expansion would need to be justified and would be subject to its own environmental review and permit process.

5. It was noted by agency representatives that issues related to avoidance and minimization need to be addressed before mitigation can be considered.

6. The USFWS noted the importance and value of the large mangrove forest located on the east end of the airport. This forest would be severely impacted by the proposed RSA project. It was asked if it was possible to only have an RSA on one end. The need to provide a RSA for take-offs and landings, and how that required a RSA on both ends, was discussed.

7. It was asked if the runway could be shifted to the west to reduce/avoid impacts to the mangrove forest located east of the runway. It was noted that a high school and residential areas area located to west of the airport would likely incur impacts from a shift in the runway thresholds.

8. The SFWMD noted that the presentation of the footprint and estimate of 31 acres of impact presented did not include secondary impacts. It was acknowledged that the permit process will require consideration of secondary impacts.

9. Avoidance was cited as the primary concern among agency representatives present at the meeting.

10. The Marsh rabbit and Silver rice rat were discussed. USFWS noted that if the project involved these species, it will increase the complexity/difficulty of obtaining environmental permits and approvals.

11. The lack of large tracts of land and potential mitigation sites was noted by agency representatives. The need to look for on-site or nearby mitigation alternatives was discussed. The possibility of looking at nearby keys was mentioned as a possible strategy. The concept of mitigating on Key West would be the preferred scenario.

12. A brief discussion of some previous on-airport mitigation projects and potential projects took place. Most mitigation projects in the vicinity of the airport would require cooperation and consent of the City of Key West.

13. The need to consider hydrology and water quality was discussed. Portions of the salt ponds are tidally influenced through canals/culverts and other portions are dependent on rainfall.

14. Mitigation scenarios for this magnitude of impact (31 acres) would likely require a combination of methods that may include: creation, restoration, enhancement, and exotic species removal.

15. Potential impacts to migratory species is an issue of concern.

16. The issue of other technologies that would reduce the RSA footprint was brought up by agency representatives. In particular the use of Engineered Materials Arresting Systems (EMAS) and a smaller RSA footprint. EMAS was

discussed as a technology used at several other airports. The cost of construction and maintenance was noted. The FAA is designing an EMAS project for use at the Fort Lauderdale airport. It was noted that the EMAS is not considered a way to meet RSA standards, but a method to enhance safety if a standard RSA could not be achieved.

17. It was asked what other alternatives, including the "do-nothing" alternative, were being considered. The FAA stated that the feasibility study does not include alternatives. The task at hand is to evaluate the feasibility of achieving the standard RSA. If it is determined that the standard RSA is not feasible, then additional study of methods to enhance safety can be considered. In addition to environmental issues, the FAA said cost will be one of the factors considered in deciding if the standard RSA is practicable.

18. A discussion of alternatives mentioned the relocation of commercial activity to the Marathon Airport. Airfield configuration would not meet design criteria for runway-to- taxiway separation at the Marathon Airport.

19. A discussion of airline flights and economics took place. It was asked if the airlines can satisfy demand with smaller aircraft that may have lesser runway and/or RSA requirements. The intent is to balance environmental economics with airline economics. It was noted that the large number of tourists using the airport come to Key West to enjoy the environment.

    The FAA stated that it cannot regulate the type of aircraft operating at an airport, if that aircraft operates safely. Planes flying into the airport that may need additional runway length have to offload fuel or passengers to meet landing or take-off requirements. Currently, some flights cannot fill all available seats in order to meet weight limits.

20. The RSA and runway needs for smaller aircraft was briefly discussed. The basis for determining airport design criteria and ARC is based on the Critical Aircraft, which is the most demanding aircraft having at least 500 annual operations at the airport. It was noted that most of the smaller aircraft (single-engine) operating at the airport could operate on 4,800 or less, but the safety requirements are based on critical aircraft.

21. The FAA Airport Design manual shows that the 500' width and 1,000' length beyond each runway end is required for all C and D aircraft approach categories and design groups. However, the RSA width can be reduced to 400 feet for C-I and C-II ARCs.

22. It was requested again that consideration be given to the economics and aircraft operations. The possibility of using smaller aircraft and reducing the RSA footprint should be a consideration.

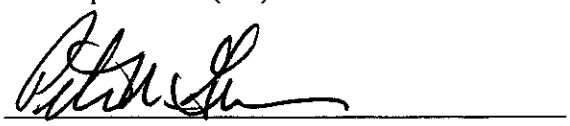
23. It was acknowledged that the proposed RSA will affect some prior mitigation areas. This should be considered in the development of mitigation scenarios.

24. A brief discussion of possible mitigation options included mention of coordination with personnel at the Key West Naval Air Station (Boca Chica), City of Key West, and other environmental organizations.

25. It was recommended by SFWMD that URS/FAA consolidate and consider issues discussed. Agency representatives will submit written comments/issues/questions to URS within 30 days.

26. Tentative date for next meeting is December 4 or December 5, 2002 at the Key West Airport. URS will coordinate and send out confirmation letters.

This is my understanding of the matters discussed. If there are any discrepancies or omissions, please contact me as soon as possible at (813) 675-6556.



Peter M. Green
URS Corporation